

## **MODULE VI**

### **CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS** **SCHEDULE OF COMPLIANCE**

#### **VI.A. SOLID WASTE MANAGEMENT UNITS**

- VI.A.1. This permit supersedes the Stipulation and Consent Order issued by the Utah Solid and Hazardous Waste Committee to Chevron Products Company, also known as the Corrective Action Order (CAO). The effective date of the CAO is April 5, 1991. The CAO required a Corrective Action Process for production of six Closure Plans, a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), a Solid Waste Management Unit Assessment Plan, a Corrective Action Plan (CAP), Interim Corrective Measures and groundwater monitoring at the refinery. The status of the above CAO requirements is found in Attachment 5. The provisions of the CAO, including its duration, are hereby terminated on the date of issuance of this Post Closure Permit.
- VI.A.2. As part of the RFI, the Permittee prepared a Corrective Action Plan, which was submitted April 5, 1996 and approved by the Executive Secretary on April 7, 1997.
- VI.A.3. The Executive Secretary may append additional Solid Waste Management Units to those in Chevron's RFI at the request of the Permittee in accordance with R315-3-4.3 or upon receipt of any other information in accordance with R315-3-4.2.

#### **VI.B. STANDARD CONDITIONS**

- VI.B.1. Failure to submit the information required by Module VI or falsification of any submitted information, is grounds for termination of this permit in accordance with R315-3-4.4.
- VI.B.2. The Permittee shall sign and certify all plans, reports, notifications, and other submissions to the Executive Secretary in accordance with Condition I.G.
- VI.B.3. The Permittee shall submit copies of each plan, report, notification, or other submissions required by the Executive Secretary.

- VI.B.4. Upon written approval from the Executive Secretary, all plans and schedules required by the conditions in Module VI shall be incorporated into Module VI of this permit in accordance with Condition VI.I. Any noncompliance with such approved plans and schedules shall be deemed noncompliance with this permit.
- VI.B.5. Upon written approval from the Executive Secretary in accordance with Condition VI.I, the Permittee shall receive extension(s) of the specified compliance schedule due date(s) for the submittal(s) required by Module VI.
- VI.B.6. If the Executive Secretary determines that further action beyond that provided by Module VI, or changes to that, which are stated herein, are warranted, the Executive Secretary shall modify Module VI in accordance with Condition VI.I.
- VI.B.7. All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to conditions in Module VI shall be maintained at the Facility during the effective term of this permit.

**VI.C. RCRA FACILITY INVESTIGATION**

- VI.C.1. The Permittee conducted an RFI as required by Paragraphs 34-41 of the signed April 5, 1991 CAO. Tasks I, II, III, and IV of the RFI have been submitted, approved, and conducted in accordance with the CAO. The RFI is used to support the CAP.
- VI.C.2. The Permittee prepared and submitted a final RFI Report on February 2, 1995, which was later reviewed and approved by the Executive Secretary on October 6, 1995. The Permittee performed the RFI as specified in Paragraph 34 of the approved April 5, 1991 CAO. The RFI was conducted pursuant to the RFI Work Plan prepared and submitted by the Permittee on October 2, 1991. The RFI Work Plan was approved by the Executive Secretary on January 29, 1993 prior to initiating work for the RFI.
- VI.C.3. The Permittee conducted the RFI for the 27 Solid Waste Management Units identified in 1991 CAO plus "Groundwater," which was designated in the February 2, 1995 final RFI Report as the 28th SWMU.

**VI.D. INTERIM MEASURES AND VOLUNTARY CLEAN UP ACTIONS**

- VI.D.1. If, during the course of any activity initiated in compliance with the permit conditions of Module VI of this permit, the Executive Secretary or the Permittee determines that a release or potential release of hazardous waste and/or hazardous waste constituents from a Solid Waste Management Unit poses a threat to human health and the environment, the Permittee may be required to perform specific interim measures.
- VI.D.2. The Executive Secretary shall notify the Permittee in writing of the requirement to perform the interim measures in accordance with Condition VI.D.3.
- VI.D.3. Within thirty (30) calendar days of receiving the written notification requiring Interim Measures as specified in VI.D.2, the Permittee shall provide an Interim Measures Plan to the Executive Secretary for review and approval.
- VI.D.4. The Permittee shall implement the Interim Measures Plan in accordance with Condition VI.D.3.
- VI.D.5. The Permittee may initiate voluntary interim measures in accordance with Conditions VI.D.6 and VI.D.7.
- VI.D.6. In determining whether an interim measure is required, the Executive Secretary (or the Permittee in the case of voluntary interim measures) shall consider the following:
- VI.D.6.a. Time required developing and implementing a final remedy,
  - VI.D.6.b. Actual and potential exposure of human and environmental receptors,
  - VI.D.6.c. Actual and potential contamination to the environment,
  - VI.D.6.d. The potential for further degradation of the medium absent interim measures,
  - VI.D.6.e. Presence of hazardous waste in containers that may pose a threat of release,
  - VI.D.6.f. Presence and concentration of hazardous waste including hazardous waste constituents in soils which have the potential to migrate to groundwater or surface water,

- VI.D.6.g. Weather conditions that may affect the current levels of contamination,
- VI.D.6.h. Risks of fire, explosion, or accident, and
- VI.D.6.i. Other situations that may pose a threat to human health and the environment.
- VI.D.7. The Interim Measures Plan shall identify specific actions to be taken to implement the interim measures and a schedule for implementing the required measures. The Interim Measures Plan shall be incorporated into this permit and shall include, but not be limited to, the following:
- VI.D.7.a. Objectives of the interim measure which indicate how it will mitigate a potential threat to human health (health and safety requirements) and the environment and/or is consistent with and integrated into any long-term solution at the Facility;
- VI.D.7.b. Data collection quality assurance and data management information;
- VI.D.7.c. Design plans and specifications, construction requirements, operation and maintenance requirements, project schedules, and final design documents;
- VI.D.7.d. Construction quality assurance objectives, inspection activities, sampling requirements, and documentation; and
- VI.D.7.e. Schedule for submittal of the following reports: progress reports, interim measures workplan, final design documents, draft interim measures report, and final interim measures report.
- VI.E. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNITS**
- VI.E.1. The Permittee shall notify the Executive Secretary in writing, of any newly identified Solid Waste Management Unit(s) not identified in Condition VI.A, within thirty (30) calendar days of discovering the Solid Waste Management Unit(s). The notification shall include the location of the new Solid Waste Management Unit(s) and information on the suspected or known wastes at the site(s).

- VI.E.2. Within one hundred fifty (150) calendar days following discovery of the Solid Waste Management Unit(s), the Permittee shall submit a Solid Waste Management Unit Assessment Plan to the Executive Secretary.
- VI.E.3. The Solid Waste Management Unit Assessment Plan shall include:
- VI.E.3.a. A description of past and present operations at the unit(s); and
- VI.E.3.b. Any groundwater, surface water, soil (surface or subsurface strata), or air sampling and analysis data needed to determine whether a release of hazardous waste or hazardous waste constituents from such units is likely to occur. The Solid Waste Management Assessment Plan shall demonstrate that the sampling and analysis plan, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and/or hazardous waste constituents from the newly discovered Solid Waste Management Units to the environment.
- VI.E.4. The Solid Waste Management Unit Assessment Plan shall be evaluated by the Executive Secretary and;
- VI.E.4.a. The Permittee shall receive written approval from the Executive Secretary for the Solid Waste Management Unit Assessment Plan; or
- VI.E.4.b. The Permittee shall receive written notice from the Executive Secretary of the Solid Waste Management Unit Assessment Plan's deficiencies and the written notice will specify a due date for submittal of a revised assessment plan; or
- VI.E.4.c. The Permittee shall receive written notice from the Executive Secretary of the revisions incorporated by the Executive Secretary in the Solid Waste Management Unit Assessment Plan. The revised assessment plan shall become the approved Solid Waste Management Assessment Plan.
- VI.E.5. The Solid Waste Management Unit Assessment Plan (SWMU Assessment Plan), as approved by the Executive Secretary, shall be incorporated within Module VI in accordance with Condition I.D.1. The Permittee shall be notified in writing of the approval of the permit modification.

- VI.E.6. The Permittee shall implement the approved SWMU Assessment Plan within thirty (30) calendar days of receiving written notice of the permit modification approval specified in Condition VI.E.5.
- VI.E.7. The SWMU Assessment Plan shall contain a schedule for a Solid Waste Management Unit Assessment Report (SWMU Assessment Report) including the date it will be submitted to the Executive Secretary.
- VI.E.8. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan. For each newly listed Solid Waste Management Unit, the SWMU Assessment Report shall provide:
- VI.E.8.a. The Solid Waste Management Unit location identified on a map;
- VI.E.8.b. The type and function of the unit, including general dimensions and a structural description;
- VI.E.8.c. The period during which the unit was operated; and
- VI.E.8.d. A list of all wastes managed at the Solid Waste Management Unit and results of all sampling and analysis used to determine whether releases of hazardous wastes and/or hazardous waste constituents have occurred, are occurring, or are likely to occur from the unit.
- VI.E.9. Based on results of the SWMU Assessment Report, the Executive Secretary shall determine the need for further assessments at specific units in the SWMU Assessment Plan. If the Executive Secretary determines that such assessments are needed, the Executive Secretary shall require the Permittee to prepare a plan for such assessments in accordance with VI.E.3.
- VI.E.10. Based on the results of the assessments required by Condition VI.E.9, the Executive Secretary may require the Permittee to submit a remediation schedule and plan.
- VI.E.11. Within fifteen (15) days of discovery, the Permittee shall notify the Executive Secretary in writing, of any release(s) of hazardous waste or hazardous waste constituent(s) discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities undertaken. Such releases may be from already documented or newly

identified units. The Executive Secretary shall require further assessments of the new releases in accordance with Condition VI.E.3.

**VI.F**

**DETERMINATION OF NO FURTHER ACTIONS**

- VI.F.1. The Permittee may petition the Executive Secretary to terminate the schedule of compliance for Corrective Action of Solid Waste Management Units, in Module VI, not previously specified in the CAP.
- VI.F.2. The CAP, submitted to the Executive Secretary on April 5, 1996, contained information from the RFI demonstrating that there have been no releases of hazardous waste or hazardous waste constituents that pose a threat to human health or the environment from SWMUs at the Facility.
- VI.F.3. A determination of no further action, in accordance with Condition VI.F.1, shall not preclude the Executive Secretary from requiring further investigations, studies, or remediation at a later date if new information or subsequent analysis indicates a release or potential of a release from a Solid Waste Management Unit at the Facility. In such a case, the Executive Secretary shall initiate either a modification to the Corrective Action Schedule of Compliance (Module VI) in accordance with Condition I.D.1.

**VI.G.**

**CORRECTIVE ACTION PLAN**

- VI.G.1 Based on the results of the RCRA Facility Investigation, submitted February 2, 1995 to the Executive Secretary, a CAP for all identified SWMUs in the RFI was submitted April 5, 1996 and approved by the Executive Secretary on April 7, 1997. The "Groundwater" SWMU, in the RFI, is now recognized as the "Groundwater Management Area" (GWMA) SWMU. The purpose of the CAP was to develop and evaluate corrective action alternatives and to outline one or more alternate corrective measures, which will satisfy the target cleanup objectives. The CAP included:
- VI.G.1.a. Target cleanup objectives,
- VI.G.1.b. Corrective action(s) which shall satisfy target cleanup objectives,
- VI.G.1.c. Summary of all corrective measure alternatives examined for the CAP, and

- VI.G.1.d. Schedule for implementation of the corrective action(s) according the time frame and schedule of this Permit.
- VI.G.2. Since CAP approval on April 7, 1997, the Permittee has implemented corrective action(s) as outlined in the CAP schedule.
- VI.G.3. The Permittee shall furnish or retain all personnel, materials, and services necessary for the implementation of the CAP.

**VI.H. REPORTING REQUIREMENTS**

- VI.H.1. Unless otherwise required by the Executive Secretary, the Permittee shall submit to the Executive Secretary written annual progress reports of all activities conducted pursuant to the Conditions of Module VI. The Permittee shall initially submit the annual progress reports no later than ninety (90) calendar days after the effective date of this permit. A corrective action activity report shall be included as an appendage of the Permittee's annual groundwater report to the Executive Secretary.
- VI.H.2. The semi-annual progress reports shall contain:
- VI.H.2.a. A description of the work completed;
- VI.H.2.b. Summaries of all findings and all raw data;
- VI.H.2.c. Summaries of all problems encountered during the reporting period and actions taken or to be taken to rectify problems; and
- VI.H.2.d. Projected work for the next reporting period.
- VI.H.3. The Permittee shall maintain copies of other reports, drilling logs, and data at the Facility during the effective period of this permit. The Permittee shall provide copies of the said reports, logs, and data to the Executive Secretary upon request.
- VI.H.4. As specified under condition VI.B.6, the Executive Secretary may require the Permittee to conduct new or more extensive assessments, investigations, or studies, as needed, based on information provided in these progress reports or other supporting information.



**VI.I. MODIFICATION OF THE CORRECTIVE ACTION SCHEDULE OF COMPLIANCE**

- VI.I.1. A request for modifications of the final compliance dates pursuant to the permit conditions in Module VI shall be submitted to the Executive Secretary for approval, in accordance with Condition I.D.2.
- VI.I.2. Pursuant to Condition I.D.1, the compliance schedules shall be modified if the Executive Secretary determines that good cause exists.
- VI.I.3. The Permittee shall submit a request for modifications of the interim compliance dates that do not affect the final compliance dates to the Executive Secretary for approval. If the Executive Secretary approves the interim compliance date modifications, the following table shall incorporate the modified compliance dates in accordance with Condition I.D.1.
- VI.I.4. The schedule of compliance for corrective action, interim measures and all other submittals stipulated in the 1997 Permit are summarized on Table VI-1.

**TABLE VI-1  
CORRECTIVE ACTION COMPLIANCE SCHEDULE**

<b>FACILITY SUBMITTAL</b>	<b>ACTION AND DATE</b>
LWMA Final Construction Quality Assurance Plan	Submitted June 29, 1995 approved by the Executive Secretary October 30, 1995.
LWMA Final Corrective Action Plan, with design and plans for construction	Accepted by the Executive Secretary, September 1995
Facility Corrective Action Plan	Submitted to the Executive Secretary on April 5, 1996.
Facility Corrective Action Plan	Approved by the Executive Secretary April 7, 1997.
Facility Corrective Action Plan - Construction and Implementation plans by designated unit	As specified in the CAP and as approved by the Executive Secretary, April 7, 1997
Post Closure Permit	Issued by Executive Secretary, September 2, 1997
Survey of the RWMA for attachment to deed	Official boundary survey prepared and submitted to Davis County Recorder's Office for deed attachment 1998
Fence and warning signs constructed around RWMA	Construction completed in 1998
Construction of corrective measures at regulated units	As approved in final CAP. Dates vary.
Corrective measures construction progress reports	Submitted throughout construction in accordance with Post Closure Permit on each respective unit, i.e. LWMA, NTF GWI, Landfarm
Completion of the LWMA Remediation Project	December 1998
LWMA Final Remedy Corrective Action Report	Submitted to Executive Secretary November 1999
Wastewater Treatment System - Ponds 2 and 3 Final Remedy Corrective Action Report	Submitted to Executive Secretary December 1999
LWMA Final Remedy Corrective Action Report	Accepted by Executive Secretary, June 2000
Wastewater Treatment System Ponds 2 and 3 Final Remedy Report	Executive Secretary Final Remedy Corrective Action, 2001
Landfarm – Landfarm Storage Area Closure Report	Submitted to Executive Secretary February 15, 2001

**TABLE VI-1 (Continued)**  
**CORRECTIVE ACTION COMPLIANCE SCHEDULE**

<b>FACILITY SUBMITTAL</b>	<b>ACTION AND DATE</b>
Landfarm – Landfarm Storage Area Closure Report	Executive Secretary rejects Closure Report September 2001. Use of averages not allowed.
Request for Class 1 Modification to Post Closure Permit	Submitted to Executive Secretary March 29, 2002
Request for Class 2 Modification to Post Closure Permit	Submitted to Executive Secretary July 11, 2002
Permission to proceed with Permit modifications	Received from Executive Secretary July 12, 2002.
Modified Post Closure Permit	Submitted to Executive Secretary October 28, 2002.
Landfarm – Landfarm Storage Area Closure Report	Re-submittal to Executive Secretary March 25, 2003. Approved September 2003.